LPDES PERMIT NO. LA0000841 (Agency Interest No. 3230)

LPDES FACT SHEET and RATIONALE
FOR THE DRAFT LOUISIANA POLLUTANT DISCHARGE ELIMINATION SYSTEM (LPDES) PERMIT TO DISCHARGE TO WATERS OF LOUISIANA

I. **Company/Facility Name:** ExxonMobil Chemical Company
Baton Rouge Resin Finishing Plant
12480 Scenic Highway
Baton Rouge, Louisiana 70807

II. **Issuing Office:** Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services
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LAC 33:IX Citations: Unless otherwise stated, citations to LAC 33:IX refer to promulgated regulations listed at Louisiana Administrative Code, Title 33, Part IX.

40 CFR Citations: Unless otherwise stated, citations to 40 CFR refer to promulgated regulations listed at Title 40, Code of Federal Regulations in accordance with the dates specified at LAC 33:IX.4901, 4903, and 2301.F.

IV. **Permit Action/Status:**

A. Reason For Permit Action:

Proposed reissuance of a Louisiana Pollutant Discharge Elimination System (LPDES) permit for a 5-year term following regulations promulgated at LAC 33:IX.2711/40 CFR 122.46.

In order to ease the transition from NPDES to LPDES permits, dual regulatory references are provided where applicable. The LAC references are the legal references while the 40 CFR references are presented for informational purposes.

only. In most cases, LAC language is based on and is identical to the 40 CFR language. 40 CFR Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903 and will not have dual references. In addition, state standards (LAC 33:IX. Chapter 11) will not have dual references.

B. LPDES permit: Permit effective date: August 1, 2003
Permit minor modification date: September 1, 2003
Permit expiration date: July 31, 2008

EPA has not retained enforcement authority.

C. Application submittal date: Application received on January 24, 2008, application addenda received on March 7, 2008 and November 18, 2008, additional information received via email on October 30, 2008.

V. Facility Information:

A. Location – 12480 Scenic Highway, Baton Rouge, East Baton Rouge Parish (Latitude 30°33'26", Longitude 91°12'01").

B. Applicant Activity -

According to the application, the Baton Rouge Resin Finishing Plant manufactures petroleum hydrocarbon resins. The resin products are solidified and packaged into bags, boxes and drums. Molten resin is loaded into tank cars and tank trucks. In addition, resin/toluene/oil solutions are produced in mixing facilities.

C. Technology Basis - (40 CFR Chapter 1, Subchapter N/Parts 401, 405-415, and 417-471 have been adopted by reference at LAC 33:IX.4903)

Guidelines	Reference
Organic Chemicals, Plastics, and Synthetic Fibers	40 CFR 414, Subparts H, I and J

Other sources of technology based limits:

- LDEQ Stormwater Guidance, letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)
- Best Professional Judgement
- Class I Sanitary Discharge General Permit (LAG530000)

D. Fee Rate -
1. Fee Rating Facility Type: Major
2. Complexity Type: VI
3. Wastewater Type: II
4. SIC code: 2821

E. Continuous Facility Effluent Flow - 0.460 MGD (30-day max)

VI. Receiving Waters: Unnamed ditch to Ash Slough, thence to Cypress Bayou, thence to Comite River

A. TSS (15%), mg/L: 5.0 mg/l*
B. Average Hardness, mg/L $CaCO_3$: 82.0 mg/l*
C. Critical Flow, cfs: 0.1*
D. Mixing Zone Fraction: 1 *
E. Harmonic Mean Flow, cfs: 1.0*
F. River Basin: Lake Pontchartrain, Segment No.: 040103
G. Designated Uses: primary contact recreation, secondary contact recreation, and fish and wildlife propagation

* Stream Data information based upon the following: Water Quality Management Plan, Volume 5A, 1994; LAC 33:IX Chapter 11, and from recommendations from the Engineering Section. Hardness and 15% TSS data are based on a letter from Aydell (LDEQ) to LaRerrara (CK Associates) dated December 15, 1997.

VII. Outfall Information:

Outfall 001

A. Type of wastewater – The continuous discharge of treated process wastewater, process area stormwater, hydrostatic test water, pump and drum seal water, laboratory wastewater, maintenance washdown, excess well water overflow, sanitary wastewater, fire fighting and equipment test water, non-process area stormwater, utility wastewaters, including but not limited to, boiler blowdown, cooling tower blowdown and drift and steam condensate

B. Location – At the point of discharge from a pipe from the wastewater treatment plant downstream of the plant weir system prior to entering the plant ditch system that flows to Ash Slough (Latitude 30°33'31", Longitude 91°11'40")

C. Treatment – Treatment of wastewater consists of:
- oil/water separation
- sedimentation
- steam stripping
- equalization/neutralization
- clarification
- aerobic digestion (activated sludge)

D. Flow – Continuous: 0.460 MGD (30-Day Max) (See Appendix A-1 for a breakdown of flow from contributing streams)

E. Receiving waters – Unnamed ditch to Ash Slough, thence to Cypress Bayou, thence to Comite River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040103

G. Effluent data – See Appendix C

Outfall 101

A. Type of wastewater – The intermittent discharge of treated sanitary wastewater

B. Location – At the point of discharge from the sanitary wastewater treatment facility prior to mixing with the waters of Outfall 001 (Latitude 30°33'30", Longitude 91°11'45")

C. Treatment – sedimentation, rotating biological contactor and chlorination

D. Flow – Intermittent, 0.003364 MGD.

E. Receiving waters – Unnamed ditch to Ash Slough, thence to Cypress Bayou, thence to Comite River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040103

Outfall 002

A. Type of wastewater – The intermittent discharge of low contamination potential stormwater from non-process areas and air conditioner condensate

B. Location – At the point of discharge from the plant weir system in the plant ditch system that flows to Ash Slough (Latitude 30°33'31", Longitude 91°11'40")

C. Treatment – None

D. Flow – Intermittent, 2.62 MGD

E. Receiving waters – Unnamed ditch to Ash Slough, thence to Cypress Bayou, thence to Comite River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040103

G. Effluent data – See Appendix C

Outfall 003

A. Type of wastewater – The intermittent discharge of low contamination potential stormwater from non-process areas

B. Location – At the point of discharge in the plant ditch system across the road from the plant weir system that flows to Ash Slough (Latitude 30°33'32", Longitude 91°11'39")

C. Treatment – None

D. Flow – Intermittent, 1.23 MGD

E. Receiving waters – Unnamed ditch to Ash Slough, thence to Cypress Bayou, thence to Comite River

F. Basin and segment – Lake Pontchartrain Basin, Segment 040103

VIII. Proposed Permit Limits and Rationale:

The specific effluent limitations and/or conditions will be found in the draft permit. Development and calculation of permit limits are detailed in the Permit Limit Rationale section below.

The following section sets forth the principal facts and the significant factual, legal, methodological, and policy questions considered in preparing the draft permit. Also set forth are

any calculations or other explanations of the derivation of specific effluent limitations and conditions, including a citation to the applicable effluent limitation guideline or performance standard provisions as required under LAC 33:IX.2707/40 CFR Part 122.44 and reasons why they are applicable or an explanation of how the alternate effluent limitations were developed.

A. PERMIT CHANGES

1. Outfall 001 – In some cases mass limitations have slightly decreased based upon the flow information provided in the January 24, 2008 application.

2. Outfall 001 – The biomonitoring dilution series has changed based upon new flow information. Additionally, the wet limit established in the previous permit has been removed. See Section VIII.E (site specific considerations) below.

3. Outfall 003 – Upon request of the permittee, this outfall has been added to the permit.

4. Outfall 001 – Benzene monitoring has been reduced to 1/ 2 months and COD monitoring has been reduced to 2/month in accordance with the USEPA Memorandum "Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies".

5. Outfall 001 – The mass limitations for BOD and TSS have increased based upon of OCPSF and BPJ loading calculations. The previous permit established limitations for BOD and TSS based upon the 1986 permit, due to the receiving stream's 303(d) impairment of organic enrichment and suspended solids. Since issuance of the previous permit, these impairments have been delisted. Therefore, the draft permit establishes BOD and TSS limitations based upon the entire calculated technology allocation. (See Appendix A-1)

6. Outfall 002 – The wastewater description for Outfall 002 has been modified to include the discharge of air conditioner condensate.

7. Outfall 001 – The permittee requested that they be allowed to report zero (0) for Oil & Grease in lieu of less than (<) Minimum Quantification Level (MQL) when reporting a non-detect on their DMRs. This Office concurs with this request. In accordance with EPA Method 1664, Revision A, the minimum level of quantification is 5.0 mg/l. Therefore, the draft permit has included oil & grease (with an MQL of 5.0 mg/l) in Part II, Paragraph J. The permittee may report zero (0) for Oil & Grease if it is not detected in laboratory analysis, as long as an EPA approved method (which specifies a minimum level of quantification of 5.0 mg/l) is being used by the laboratory.

B. TECHNOLOGY-BASED VERSUS WATER QUALITY STANDARDS-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Following regulations promulgated at LAC 33:IX.2707.L.2.b/40 CFR Part 122.44(l)(2)(ii), the draft permit limits are based on either technology-based effluent limits pursuant to LAC 33:IX.2707.A/40 CFR Part 122.44(a) or on State water quality standards and requirements pursuant to LAC 33:IX.2707.D/40 CFR Part 122.44(d), whichever are more stringent.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS AND CONDITIONS

Regulations promulgated at LAC 33:IX.2707.A/40 CFR Part 122.44(a) require technology-based effluent limitations to be placed in LPDES permits based on effluent limitations guidelines where applicable, on BPJ (best professional judgement) in the absence of guidelines, or on a combination of the two. The following is a rationale for the limitations established in the permit.

ExxonMobil Chemical Company is subject to Best Practicable Control Technology Currently Available (BPT) and Best Available Technology Economically Achievable (BAT) effluent limitation guidelines listed below:

Manufacturing Operation	Guideline
Organic Chemicals, Plastics, and Synthetic Fibers	40 CFR 414, Subparts H, I and J

WATER QUALITY-BASED EFFLUENT LIMITATIONS

Technology-based effluent limitations and/or specific analytical results from the permittee's application were screened against state water quality numerical standard based limitations by following guidance procedures established in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008.

In accordance with 40 CFR 122.44(d)(I)/LAC 33:IX.2707.D.1., the existing discharge was evaluated in accordance with the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008, to determine whether pollutants would be discharged "at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any state water quality standard." Calculations, results, and documentation are given in Appendix B.

The following pollutants received water quality based effluent limitations:

Carbon Tetrachloride
1,2-Dichloroethane (EDC)
1,1-Dichloroethylene
Tetrachloroethylene
Hexachlorobenzene
Hexachlorobutadiene

Minimum quantification levels (MQLs) for state water quality numerical standards-based effluent limitations are set at the values listed in the Permitting Guidance Document for Implementing Louisiana Surface Water Quality Standards, LDEQ, April 16, 2008. They are also listed in Part II of the permit.

To further ensure compliance with 40 CFR 122.44(d)(I), whole effluent toxicity testing has been established for Outfall 001 (See Section VIII.E below).

Below is a summary of the proposed effluent limitations:

Outfall 001 – The continuous discharge of treated process wastewater, process area stormwater, hydrostatic test water, pump and drum seal water, laboratory wastewater, maintenance washdown, excess well water overflow, sanitary wastewater, fire fighting and equipment test water, non-process area stormwater, utility wastewaters, including but not limited to, boiler blowdown, cooling tower blowdown and drift, and steam condensate

Parameter	Monthly Avg. (lbs/day)	Daily Max. (lbs/day)	Frequency	Sample Type
Flow-MGD	Report	Report	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Number of Events >60 Minutes	---	0(*1)	Continuous	Recorder
pH Range Excursions (Continuous Monitoring), Monthly Total Accumulated Time in Minutes	---	446(*1)	Continuous	Recorder
pH Min/Max Values (Standard Units)	Report (Min)	Report (Max)	Continuous	Recorder
BOD_5	57	140	1/week	24-hr. Composite
TSS	218	698	1/week	24-hr. Composite
COD	157	314	2/month	24-hr. Composite

VOLATILE COMPOUNDS				
Acrylonitrile	0.09	0.22	1/year	24-hr. Composite
Benzene	0.05	0.12	1/ 2 months	24-hr. Composite
Carbon Tetrachloride	0.01	0.026	1/year	24-hr. Composite
Chlorobenzene	0.09	0.24	1/year	24-hr. Composite
Chloroethane	0.10	0.26	1/year	24-hr. Composite
Chloroform	0.08	0.22	1/year	24-hr. Composite
1,1-Dichloroethane	0.02	0.05	1/year	24-hr. Composite
1,2-Dichloroethane	0.062	0.149	1/year	24-hr. Composite
1,1-Dichloroethylene	0.005	0.0127	1/year	24-hr. Composite
1,2-trans-Dichlorocthylene	0.02	0.06	1/year	24-hr. Composite
1,2-Dichloropropane	0.17	0.56	1/year	24-hr. Composite
1,3-Dichloropropylene	0.13	0.51	1/year	24-hr. Composite
Ethylbenzene	0.10	0.27	1/year	24-hr. Composite
Methyl Chloride	0.09	0.24	1/year	24-hr. Composite
Methylene Chloride	0.03	0.13	1/year	24-hr. Composite
Tetrachloroethylene	0.023	0.055	1/year	24-hr. Composite
Toluene	0.03	0.07	1/year	24-hr. Composite
1,1,1-Trichloroethane	0.02	0.05	1/year	24-hr. Composite
1,1,2-Trichloroethane	0.03	0.09	1/year	24-hr. Composite
Trichloroethylene	0.02	0.06	1/year	24-hr. Composite
Vinyl Chloride	0.09	0.19	1/year	24-hr. Composite
ACID COMPOUNDS				
2-Chlorophenol	0.01	0.03	1/year	24-hr. Composite
2,4-Dichlorophenol	0.01	0.03	1/year	24-hr. Composite
2,4-Dimethylphenol	0.02	0.04	1/year	24-hr. Composite
4,6-Dinitro-o-Cresol	0.07	0.25	1/year	24-hr. Composite
2,4-Dinitrophenol	0.77	2.70	1/year	24-hr. Composite
2-Nitrophenol	0.05	0.16	1/year	24-hr. Composite
4-Nitrophenol	0.12	0.39	1/year	24-hr. Composite
Phenol	0.02	0.04	1/year	24-hr. Composite
BASE NEUTRAL COMPOUNDS				
Acenaphthene	0.02	0.05	1/year	24-hr. Composite
Acenaphthylene	0.02	0.05	1/year	24-hr. Composite
Anthracene	0.02	0.05	1/year	24-hr. Composite
Benzo(a)anthracene	0.02	0.05	1/year	24-hr. Composite
Benzo(a)pyrene	0.02	0.05	1/year	24-hr. Composite
3,4-Benzofluoranthene	0.02	0.05	1/year	24-hr. Composite
Benzo(k)fluoranthene	0.02	0.05	1/year	24-hr. Composite
Bis(2-ethylhexyl) phthalate	0.09	0.24	1/year	24-hr. Composite
Chrysene	0.02	0.05	1/year	24-hr. Composite
1,2-Dichlorobenzene	0.14	0.54	1/year	24-hr. Composite
1,3-Dichlorobenzene	0.10	0.25	1/year	24-hr. Composite
1,4-Dichlorobenzene	0.09	0.24	1/year	24-hr. Composite
Diethyl phthalate	0.05	0.13	1/year	24-hr. Composite
Dimethyl phthalate	0.02	0.04	1/year	24-hr. Composite
Di-n-butyl phthalate	0.02	0.04	1/year	24-hr. Composite
2,4-Dinitrotoluene	0.03	0.08	1/year	24-hr. Composite
2,6-Dinitrotoluene	0.08	0.19	1/year	24-hr. Composite
Fluoranthene	0.02	0.05	1/year	24-hr. Composite
Fluorene	0.02	0.05	1/year	24-hr. Composite
Hexachlorobenzene	0.000002	0.000005	1/year	24-hr. Composite
Hexachlorobutadiene	0.001	0.002	1/year	24-hr. Composite
Hexachloroethane	0.13	0.51	1/year	24-hr. Composite
Naphthalene	0.02	0.05	1/year	24-hr. Composite
Nitrobenzene	1.40	3.99	1/year	24-hr. Composite

Phenanthrene	0.02	0.05	1/year	24-hr. Composite
Pyrene	0.02	0.05	1/year	24-hr. Composite
1,2,4-Trichlorobenzene	0.14	0.53	1/year	24-hr. Composite
Whole Effluent Toxicity Testing	---	---	1/quarter	24 hr. Composite

(*1) The pH shall be within the range of 6.0 – 9.0 standard units at all times subject to continuous monitoring pH range excursion provisions. Where a permittee continuously measures the pH of wastewater as a requirement or option in an LPDES permit, the permittee shall maintain the pH of such wastewater within the range set forth in the permit, except that excursions from the range are permitted, provided:

1. The total time during which the pH values are outside the required range of pH values shall not exceed 446 minutes in any calendar month; and
2. No individual excursion from the range of pH values shall exceed 60 minutes.

EFFLUENT LIMITATIONS BASIS for Outfall 001:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b. and the previous permit.

BOD_5, TSS, toxic organics and pH: With the exception of Carbon Tetrachloride, 1,2-Dichloroethane, 1,1-Dichloroethylene, Tetrachloroethylene, Hexachlorobenzene and Hexachlorobutadiene, limitations for the toxic organics as well as BOD, TSS and pH are based upon a combination of 40 CFR 414 (Subparts H, I and J); and BPJ. See Site-Specific Considerations below and Appendix A for more detail on calculation of the limitations. Limitations for Carbon Tetrachloride, 1,2-Dichloroethane, 1,1-Dichloroethylene, Tetrachloroethylene, Hexachlorobenzene and Hexachlorobutadiene are based upon water quality (See Appendix B)

COD: The mass limitations for COD are based upon the previous permit. These BPJ limitations date back to the facility's 1981 NPDES permit, and have been determined to be BAT.

Whole Effluent Toxicity Testing: See Section E below for justification of requirements.

SITE-SPECIFIC CONSIDERATIONS:

The mass limitations for BOD and TSS have increased based upon OCPSF and BPJ loading calculations. The previous permit established limitations for BOD and TSS based upon the 1986 permit, due to the receiving stream's 303(d) impairment of organic enrichment and suspended solids. Since issuance of the previous permit, these impairments have been delisted. Therefore, the draft permit establishes BOD and TSS limitations based upon the entire calculated

technology allocation.

The previous permit established BPJ allocations for BOD and TSS loadings for utility wastewaters, first flush non-process stormwater and sanitary wastewaters that are included as part of the process wastewater stream discharged at Outfall 001. For the utility wastewaters and miscellaneous wastewaters, BOD_5 allowances grant an average concentration of 5 mg/L, and a maximum concentration of 10 mg/L; TSS allowances grant an average concentration of 57 mg/L, and a maximum concentration of 183 mg/L. The TSS concentrations are based upon 40 CFR 414 Subpart H. For sanitary discharges, BOD and TSS concentrations are based upon the previous permit and secondary treatment standards [30 mg/l (Avg) : 45 mg/l (Max)]. See Appendix A for detail on the mass calculation of these limitations.

The BPJ concentrations for BOD and TSS were established in the facility's previous permit and have been determined as BAT. Therefore, the concentration limitation basis for BOD and TSS have been retained in the draft permit. See Appendix A for detail on the mass calculation of the limitations.

Outfall 101 – The intermittent discharge of treated sanitary wastewater

Parameter	Monthly Avg.	Weekly Avg.	Frequency	Sample Type
Flow-MGD	Report	Report	1/quarter	Estimate
Fecal Coliform(col./100ml)	200	400 (*1)	1/quarter	Grab

(*1) Shall be reported as a daily maximum in lieu of a weekly average.

EFFLUENT LIMITATIONS BASIS for Outfall 101:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

Fecal Coliform: Limitations are based upon the previous permit and the Class I Sanitary Discharge General Permit (LAG530000).

Outfall 002 - The intermittent discharge of low contamination potential stormwater from non-process areas and air conditioner condensate

Outfall 003 – The intermittent discharge of low contamination potential stormwater from non-process areas

Parameter	Monthly Avg. (mg/l)	Daily Max. (mg/l)	Frequency	Sample Type
Flow-MGD	Report	Report	1/quarter	Estimate
TOC	---	50	1/quarter	Grab
Oil & Grease	---	15	1/quarter	Grab
pH Min/Max Values (Standard Units)	6.0 (Min)	9.0 (Max)	1/quarter	Grab

EFFLUENT LIMITATIONS BASIS for Outfalls 002 and 003:

Flow: The requirement to report flow is based upon LAC 33:IX.2707.I.1.b.

TOC and Oil & Grease: Limitations are based upon the previous permit and LDEQ's stormwater guidance [letter dated 6/17/87, from J. Dale Givens (LDEQ) to Myron Knudson (EPA Region 6)].

pH: Requirements are based upon the previous permit and LAC 33:IX.1113.C.1.

D. MONITORING FREQUENCIES

All monitoring frequencies are based upon the previous permit (with exception of Benzene and COD monitoring at Outfall 001). This Office has reduced the monitoring frequency for Benzene and COD (at Outfall 001) to 1/ 2 months and 2/month, respectively, in accordance with the USEPA Memorandum "Interim Guidance for Performance-Based Reductions of NPDES Permit Monitoring Frequencies." Whole Effluent Toxicity testing frequency is based upon recommendations from the Municipal and General Water Permits Section (see Appendix D). In the November 24, 2008 permit application, the permittee requested a reduction in BOD monitoring at Outfall 001. However, this Office did not reduce the monitoring frequency for BOD in the draft permit because BOD is an important parameter used as an indicator of potential organic pollutant contamination. Since most of the toxic organics limited at Outfall 001 are only tested 1/year, this Office has determined that BOD monitoring shall be no less frequent than 1/week.

E. BIOMONITORING REQUIREMENTS

It has been determined that there may be pollutants present in the effluent which may have the potential to cause toxic conditions in the receiving stream. The State of Louisiana has established a narrative criteria which states, "toxic substances shall not be present in quantities that alone or in combination will be toxic to plant or animal life." The Office of Environmental Services requires the use of the most recent EPA biomonitoring protocols.

Whole effluent biomonitoring is the most direct measure of potential toxicity which incorporates both the effects of synergism of effluent components and receiving stream water quality characteristics. Biomonitoring of the effluent is, therefore, required as a condition of this permit to assess potential toxicity.

The biomonitoring procedures stipulated as a condition of this permit for Outfall 001 are as follows:

TOXICITY TESTS	FREQUENCY*
NOEC, Pass/Fail [0/1], Lethality, Static Renewal, 7-Day Chronic, Pimephales promelas	1/3 months
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic, Pimephales promelas	1/3 months
NOEC, Value [%], Growth, Static Renewal, 7-Day Chronic, Pimephales promelas	1/3 months
NOEC, Pass/Fail [0/1], Growth, Static Renewal, 7-Day Chronic, Pimephales promelas	1/3 months

NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic, Pimephales promelas	1/3 months
NOEC, Pass/Fail [0/1], Lethality, Static Renewal 7-Day Chronic, Ceriodaphnia dubia	1/3 months
NOEC, Value [%], Lethality, Static Renewal, 7-Day Chronic Ceriodaphnia dubia	1/3 months
NOEC, Value [%], Reproduction, Static Renewal, 7-Day Chronic, Ceriodaphnia dubia	1/3 months
NOEC, Pass/Fail [0/1], Reproduction, Static Renewal 7-Day Chronic, Ceriodaphnia dubia	1/3 months
NOEC, Value [%], Coefficient of Variation, Static Renewal, 7-Day Chronic Ceriodaphnia dubia	1/3 months

* Upon successfully passing the first four quarters of WET testing after permit reissuance and in the absence of subsequent lethal and/or sublethal toxicity for one or both test species at or below the critical dilution, the permittee may apply for a testing frequency reduction. If granted, the monitoring frequency for that test species may be reduced to not less than once per year for the Pimephales promelas and not less than once per six months for the Ceriodaphnia dubia.

Toxicity tests shall be performed in accordance with protocols described in the latest revision of the "Short Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms." The stipulated test species are appropriate to measure the toxicity of the effluent consistent with the requirements of the State water quality standards. The

biomonitoring frequency has been established to reflect the likelihood of ambient toxicity and to provide data representative of the toxic potential of the facility's discharge in accordance with regulations promulgated at LAC 33:IX.2715/40 CFR Part 122.48.

Results of all dilutions as well as the associated chemical monitoring of pH, temperature, hardness, dissolved oxygen, conductivity, and alkalinity shall be documented in a full report according to the test method publication mentioned in the previous paragraph. The permittee shall submit a copy of the first full report to this Office. The full report and subsequent reports are to be retained for three (3) years following the provisions of Part III.C.3 of this permit. The permit requires the submission of certain toxicity testing information as an attachment to the Discharge Monitoring Report.

This permit may be reopened to require effluent limits, additional testing, and/or other appropriate actions to address toxicity if biomonitoring data show actual or potential ambient toxicity to be the result of the permittee's discharge to the receiving stream or water body. Modification or revocation of the permit is subject to the provisions of LAC 33:IX.3105/40 CFR 124.5. Accelerated or intensified toxicity testing may be required in accordance with Section 308 of the Clean Water Act.

Dilution Series

The permit requires five (5) dilutions in addition to the control (0% effluent) to be used in the toxicity tests. The additional effluent concentrations shall be 28%, 37%, 49%, 66%, and 88% effluent. The biomonitoring critical dilution is defined as 88% effluent.

SITE-SPECIFIC CONSIDERATIONS:

On April 6, 1992, EPA issued Administrative Order Docket No. VI-92-1194 to the Resin Finishing Plant, which required the permittee to conduct a TRE due to toxicity test failures. The TRE was conducted from March 1992 – November 1993, and the Final TRE Report was submitted in December 1993. After a review of the permittee's Final TRE Report and performance, EPA concluded to incorporate WET limits. LPDES Permit LA0000841, effective August 1, 2003 (modified effective September 1, 2003) contained a WET limit of 65.8% effluent concentration.

Since August of 2003, there have been no demonstrations of either lethal or sub-lethal toxicity at or below the effluent critical dilution and 20 tests results for each test organisms. The reasonable potential calculation shows no reasonable potential for toxicity based on the last five years of reported data.

Based on the fact that the required calculation did not find reasonable potential for effluent toxicity to exceed the Louisiana narrative standard criterion for protection of aquatic life, and that there has been no lethal or sub-lethal toxicity reported in over five years and 20 tests for each organism during that period, reasonable potential no longer exists and the permit will be issued with the standard permitting requirements for WET. The permit will include triggers to establish additional testing and toxicity studies should lethal or sub-lethal toxicity occur in the future.

IX. Compliance History/DMR Review:

Enforcement Review

The Baton Rouge Resin Finishing Plant has no open enforcement actions.

DMR Review (excursions for the period January 2006 - August 2008):

There were no excursions reported.

X. Endangered Species:

The receiving waterbody for the Baton Rouge Resin Finishing Plant is Subsegment 040103 of the Lake Pontchartrain Basin. Subsegment 040103 of the Lake Pontchartrain Basin has been identified by the U.S. Fish and Wildlife Service (FWS) as habitat for the Gulf Sturgeon, which is listed as a threatened or endangered species. This draft permit has been submitted to the FWS for review in accordance with a letter dated November 17, 2008 from Rieck (FWS) to Nolan (LDEQ). As set forth in the Memorandum of Understanding between the LDEQ and the FWS, LDEQ has made a preliminary determination that the issuance of the LPDES permit is not likely to have an adverse effect upon the Gulf Sturgeon. However, after consultation with the FWS, the LDEQ may choose to modify this permit based on information provided by the FWS. The effluent limitations established in the permit ensure protection of aquatic life and maintenance of the receiving water as aquatic habitat. Therefore, the issuance of the LPDES permit is not likely to have an adverse effect on any endangered or candidate species or the critical habitat.

XI. Historic Sites:

The discharge is from an existing facility location, which does not include an expansion on undisturbed soils. Therefore, there should be no potential effect to sites or properties on or eligible for listing on the National Register of Historic Places, and in accordance with the "Memorandum of Understanding for the Protection of Historic Properties in Louisiana Regarding LPDES Permits" no consultation with the Louisiana State Historic Preservation Officer is required.

XII. Tentative Determination:

On the basis of preliminary staff review, the Department of Environmental Quality has made a tentative determination to issue a permit for the discharges described in the application.

XIII. Variances:

No requests for variances have been received by this Office.

XIV. Public Notices:

Upon publication of the public notice, a public comment period shall begin on the date of publication and last for at least 30 days thereafter. During this period, any interested persons may submit written comments on the draft permit and may request a public hearing to clarify issues involved in the permit decision at this Office's address on the first page of the fact sheet. A request for a public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing.

A public notice will be published in a local newspaper of general circulation and in the Office of Environmental Services Public Notice Mailing List.

XV. TMDL Waterbodies:

ExxonMobil Chemical Company discharges process wastewaters, utility wastewaters, process area and non-process area stormwater, and miscellaneous wastewaters to an unnamed ditch to Ash Slouch thence to Cypress Bayou thence the Comite River (Segment 040103).

Segment 040103 is listed on LDEQ's Final 2006 303(d) List, as impaired for pathogen indictors. The facility discharges approximately 3,364 GPD of sanitary wastewaters to the receiving water; therefore, fecal coliform limitations have been established in the permit at Outfall 101.

A reopener clause will be included in the permit to allow for the establishment of more stringent effluent limitations and requirements as imposed by any future TMDLs.

XVI. Stormwater Pollution Prevention Plan (SWP3) Requirements:

In accordance with LAC 33:IX.2707.I.3 and 4 [40 CFR 122.44(I)(3) and (4)], a Part II condition is proposed for applicability to all storm water discharges from the facility, either through permitted outfalls or through outfalls which are not listed in the permit or as sheet flow. For first time permit issuance, the Part II condition requires a Storm Water Pollution Prevention Plan (SWP3) within six (6) months of the effective date of the final permit. For renewal permit

issuance, the Part II condition requires that the Storm Water Pollution Prevention Plan (SWP3) be reviewed and updated, if necessary, within six (6) months of the effective date of the final permit. If the permittee maintains other plans that contain duplicative information, those plans could be incorporated by reference to the SWP3. Examples of these type plans include, but are not limited to: Spill Prevention Control and Countermeasures Plan (SPCC), Best Management Plan (BMP), Response Plans, etc. The conditions will be found in the draft permit. Including Best Management Practice (BMP) controls in the form of a SWP3 is consistent with other LPDES and EPA permits regulating similar discharges of stormwater associated with industrial activity, as defined in LAC 33:IX.2522.B.14 [40 CFR 122.26(b)(14)].